

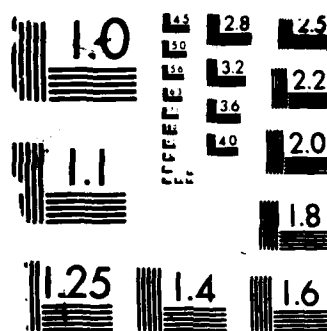
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STREAMLINING - AN ACQUISITION REFORM INITIATIVE

BY

LIEUTENANT COLONEL ALOYSIUS GREENHOUSE

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effective. Requirements must be simplified; off the shelf technology must be used; greater reliance must be placed on the ability to field equipment now that is capable of simplified upgrades as new technology emerges. And too, the costly process that requires 10 - 15 years to field a new system that is outmoded within a few years after it is in the hands of the users, must be eliminated. Fundamental to the process, must be consideration for the human factors in engineering and design. The primary objective of the process is to achieve performance, in a timely manner, and at an affordable price. Acquisition Streamlining is a major initiative that can allow the military services to meet this objective.

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STREAMLINING - AN ACQUISITION REFORM INITIATIVE

An Individual Essay

by

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ABSTRACT

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In structuring and equipping the Armed Forces to meet the needs of national security, military leaders must first discern from the national purpose and national strategy the force requirements that will provide the means to accomplish that strategy. During a time of limited funds to support the requirements for defense, the services must devise a system of acquiring military hardware that is both efficient and effective. Requirements must be simplified; off the shelf technology must be used; greater reliance must be placed on the ability to field equipment now that is capable of simplified upgrades as new technology emerges. And too, the costly process that requires 10 - 15 years to field a new system that is outmoded within a few years after it is in the hands of the users, must be eliminated. Fundamental to the process, must be consideration for the human factors in engineering and design. The primary objective of the process is to achieve performance, in a timely manner, and at an affordable price. Acquisition Streamlining is a major initiative that can allow the military services to meet this objective.

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Streamlining - An Acquisition Reform Initiative

In the first year of his presidency, Ronald Reagan kept a campaign promise--he won approval for funding of the largest military modernization program in the history of the country.

The 1.6 trillion dollars in the Appropriations Bill spread over five years was the green light for the acquisition of major new weapon systems, as well as, the authorization to speed up production and fielding of others already in the development and testing stages.

This modernization effort, dubbed "the rearming of America", by the press, was and is required in order to provide a creditable deterrent to the primary adversary of the United States. The Soviet Union spent an estimated 16% of its gross national product on its military at the same time that this country's defense budget was experiencing negative real growth. This allowed the Soviet Union to not only build its conventional and strategic forces to a level of preeminence in the world in terms of numbers alone, but also to close the all important qualitative gap in technology, long considered the trump card of the U.S. and its allies.

As dangerous as this situation has become, to most Americans, the world is at peace. Many question the wisdom of the huge sums of money spent on the military especially since the bill payer is domestic social programs. Most are in favor of a strong national defense but have serious doubt that giving an open money sack to the Pentagon is the way to achieve it.

With the country struggling under the weight of a huge national debt and the public's concern about the size of the defense budget in a time of peace, it is no wonder that the Congress has moved to reduce spending for defense programs.

Given the threat, the need for military hardware to replace aging outdated equipment to take the armed forces into the 21st century, is real and valid. However it is impractical to think that the modernization effort will be accomplished by bankrupting the nation. The reality of the day is that there is only a finite amount of resources. We cannot buy everything we want.

With this in mind, it is incumbent upon the leadership of the military to be innovative in the manner in which it will seek to satisfy military requirements. The old traditional way of doing things must be placed under the microscope and analyzed. New more effective and efficient procedures must be found and infused into the various managerial systems in order to eliminate inefficiency and do more with less.

No where has the need for innovation and creativity been more critical than in the manner in which new systems are bought. This has been highlighted by the widely reported cases of waste and fraud that has led the public to believe that something is wrong with the acquisition process. Contrary to what some may think, the perception of the public is important. After all, in the final analysis in a democratic society, all who work in the public sector are accountable to the people. Therefore this problem must be addressed and public confidence must be restored.

The Army's answer to increase efficiency and effectiveness in the manner in which equipment is procured is the Streamlined Acquisition Process.

In an article written for Program Manager, Dr. Richard Stimson states that "Streamlining is an acquisition strategy that offers new inroads into untapping the experience and ingenuity of our DOD and industry work force in defining the most cost effective contract requirements for development of new weapon systems. This approach has proved to have significant potential to reduce weapon system cost and can result in improved quality and performance." This hits at the heart of the issue. The objective of the acquisition process is to field systems that satisfy mission needs for national defense in terms of performance, timeliness, and affordable price.¹ If through streamlining, sophisticated weapon systems, that work, can be fielded in a short period of time at a substantial savings to the taxpayers, then this

process will be the most revolutionary change in military system management in the past twenty years.

It is necessary to pause at this point to address an issue which is fundamental, yet constantly overlooked in the acquisition process. This issue is just how are the urgent needs of national security determined. This is critical because it is the question of "needs" that form the basis for the request and appropriation of funds to the various services. It is the focus of the Research and Development effort. It is the theme for debate of the defense budget. And too, it is as stated, the objective of the acquisition process.

Far too often in past years the requirement of the nation's security has not been the compelling reason for buying an item. In some instances, manufacturers simply demonstrated the applicability or adaptability of a product to military use. It was then procured by the various services and incorporated into inventory. In most cases these items quickly turned into the "Edsels" of the motor pools and stock yards of the various post, camps, and stations before the OD paint dried on them.

In other instances the desire to capture the ultimate in revolutionary technology stretched out the process to field a system to fifteen years or more. This resulted in numerous changes in design and cost overruns of millions of dollars only to find that the system was out moded within a few years.

In still other cases, special interest projects were developed by near-sighted flag officers for selfish careerist reasons that were far removed from the urgent needs of national security.

How then should the needs of the services be determined? What should be the focal point in the decision making process for the procurement of new weapon systems? The answers lie clearly and explicitly in the delineation of national purpose and the strategy which the nation ascribes to for the attainment of that purpose. From this strategy then should evolve the military doctrinal concepts that are both a product of the past and are futuristic in anticipating the battlefield conditions and needs of the armed forces.

In 1975, Marshall A.A. Grechko, then Minister of Defense of the Soviet Union, described military doctrine as a product of national goals and objectives. He argued that doctrine must address the following questions:

- o What enemy will have to be faced in a possible war?
- o What is the nature of the war in which the state and its armed forces will have to take part?
- o What goals and missions might they be faced with in such a war?
- o What armed forces might be needed to perform the assigned mission?
- o How are preparations for war to be implemented?
- o What methods must be used to wage war?

While democratic societies do not have the guidepost of ideological and operational goals to lean on, military doctrine still must derive its basis from operative national strategy that is both political and adversarial, but, rooted in national concern. It is from here that the military establishment must take its missions and then equip and structure the force to provide for the security of the nation. The acquisition of military hardware then is a result of an understanding of the national strategy and the formulation of doctrinal concepts in military terms to provide the means for accomplishment of that strategy.

Each arm of service has a specific function or mission area for which it is responsible. The Army is responsible for land warfare and air defense. It must continually analyze these areas through a formalized process called Missions Area Analysis. The analysts monitor changes in the threat to national security; deficiencies in existing systems; changes in capability and operational concepts; new opportunities to reduce cost; and emerging technological opportunities.²

When a deficiency is identified the immediate response is not necessarily a proposal for a new system. Various alternatives to solve the problem are considered. These include:

- o Changing doctrine and tactics.
- o Changing force level and force mix.

- o Training.
- o Procuring additional equipment already in production.
- o Upgrading existing equipment.
- o Using commercial equipment.
- o Using foreign equipment.

Only after a determination that none of these solutions will solve the problem - either individually or in combination - should the development of a new system be considered. This then is the beginning of the research, development and acquisition process.³

Having firmly anchored the acquisition process to national strategy, a quick look at the traditional method that sought to accomplish the objective of the process is in order. It is composed of a series of sequential steps:

- o Program Initiation
- o Concept Exploration
- o Demonstration/validation
- o Full scale engineering development
- o Production & Deployment

While these steps may appear to be logical and simple they have in fact turned into a bureaucratic nightmare that breed inefficiency, results in cost overruns, and take fifteen years to complete.

The requirements on industry are fantastic. In defining system requirements, there is a mass of specifications and requirements based upon lessons learned in past

acquisitions. In fact, there are some 45,000 military specifications, data requirements, management systems and contract terms and conditions that were rather capriciously drawn or applied in the acquisition of a single system. But what worked in the past does not necessarily apply in the same way today.⁴

It is from both the desire and need to refine or upgrade all aspects of the acquisition process, with the eye to deliver products at lower cost but with equal or greater quality, that has produced the required reform in the acquisition process.

Contrary to popular belief, streamlining is not a separate and distinct acquisition process. It merely recognizes the inefficiencies in the traditional process and seeks to find and use a strategy that captures the ingenuity of people working with the process at the most opportune time. It allows flexibility in a system that was rigid. It seeks to involve industry early in the acquisition cycle in order to use their experience, judgement, and creativity in the application of military specifications. It "streamlines" the thousands of data requirements, contract terms, and conditions. It combines certain steps in the acquisition cycle, thereby cutting the time required to field a new system in half. It recognizes the trade - offs that must occur between personnel, training, resource development, logistics support development, system integration and the engineering design of the system and involves these actors

early in the demonstration and experimentations phase to facilitate total system development. It acknowledges the fact that complex technologically advanced systems can only function to the capability of the man operating the system and therefore includes from the onset human factors in the design and engineering effort.⁵

The program manager is the key. He is responsible for devising and tailoring the acquisition strategy that will be used in a particular acquisition program. He is likewise charged with the responsibility of insuring that the production and distribution of the new weapon system is brought in, on time, and at cost. In devising his acquisition strategy, using the streamlining approach the project manager should consider the application of the following principles:

- o Utilization of contractor ingenuity
- o Preclude pre-mature contractual application of military specifications and standards.
- o Specification of system level requirements in functional terms at the onset of the demonstration/validation phase.
- o State in the request for proposals and contracts, the performance requirements rather than detailed how - to procedures.
- o Control the establishment of contract requirements
- o Pursue economically producible, operationally suitable and field supportable designs.

- o Ensure complete production specifications while providing contractor flexibility to optimize design.

These principles identify and assist the program manager in implementation of improvements needed in the acquisition process that result in specifications, standards, terms and conditions that are tailored to meet only essential operational and support requirements in the procurement of quality products.⁶

One important aspect of streamlining deserves special attention. In formulating the acquisition strategy, the program manager must plan to incorporate in the design considerations future applications of evolutionary technology that will improve the capabilities of the system under development. These improvements, planned for at each stage of the acquisition process, goes beyond the stated or current performance envelope to achieve a needed operational capability, consistent with Mission Area Analysis. This is called Pre - Planned Product Improvements (P3I). The basic objectives of P3I are:

- o Shorten the acquisition and deployment time for military systems.
- o Extend the useful life of a system.
- o Reduce technical, cost, and schedule risk.
- o Improve system survivability and endurance.

A P3I effort has three distinct phases:

Phase I: The planning and research necessary to determine how a system can and will evolve in response to advancing technology or projected changes in the need. This effort continues throughout the life cycle of a system.

Phase II: The incorporation of considerations into the design of the system or the development of an Acquisition Strategy which facilitates future improvements to the system. This effort occurs when it is cost effective and operationally effective to do so, e.g., during development, production, overhaul or conversion.

Phase III: The application of actual improvements which take advantage of Phases I and II. This effort occurs when the need dictates.⁷

Complementing the acquisition process with a plan to add advanced technology to deployed systems can have a positive impact upon the ability of the service to counter the threat. It further minimizes product life cycle cost. Moreover, in a period of constrained real growth in military appropriations, P3I allows the service to retain state of the art performance through planned upgrading.

The military services are striving to meet the urgent needs of national security through the modernization of its equipment. The initial infusion of dollars to support this effort in 1981 has proved to be but a patchwork sum. The Army, alone, estimates that it will fall short some 200

billion dollars for the procurement of items identified in its five year program. However the reality is that the country simply cannot support continued growth in the defense budget. It is therefore incumbent upon the services to devise and explore innovative means to efficiently and effectively utilize the funds that are allocated to achieve and maintain a combat ready force to deter the threat. Acquisition Streamlining is such an initiative. Through the tailoring of specifications and operational requirements, reduction of contract management and reporting requirements, simplification of the acquisition process and the use of pre-planned product improvement, significant cost savings can be realized in the acquisition of new weapon systems. In addition to improving efficiency and reducing cost, this reform initiative is needed to restore discipline to the acquisition process, to change attitudes within the system and to restore public confidence in the procurement activity.

ENDNOTES

1. "Defense System Acquisition". Defense System Review. October 1984 p. 52.
2. Ibid. p. 54.
3. Ibid. p. 55.
4. "DOD Procurement on Target". Government Product News. March 1987 p. 34.
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